

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 ... Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,828	03/03/2004	Masakiyo Matsumura	249687US2	1522
22850	7590 06/19/2006 ·		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			SONG, MATTHEW J	
.,	DRIA, VA 22314		ART UNIT	PAPER NUMBER
			1722	
			DATE MAILED: 06/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)				
		10/790,828	MATSUMURA ET AL.				
		Examiner	Art Unit				
		Matthew J. Song	1722				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Discussions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period oure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 03 M	larch 2004.					
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1-38</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
· ·	5) Claim(s) is/are allowed.						
·	Claim(s) is/are rejected.						
	Claim(s) is/are objected to.						
8)区	Claim(s) <u>1-38</u> are subject to restriction and/or of	election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	r.					
10)	The drawing(s) filed on is/are: a) acc	epted or b)☐ objected to by the	Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
_	Replacement drawing sheet(s) including the correct						
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority (	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
	1. Certified copies of the priority document						
	2. Certified copies of the priority document						
	3. Copies of the certified copies of the prior	•	ed in this National Stage				
* (	application from the International Bureat See the attached detailed Office action for a list	, ,,,	ad.				
	see the attached detailed Office action for a list	or the certified copies not receive	;u.				
Attachmen		A) The leader to the control	· (DTO 442)				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D	ate				
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	5)  Notice of Informal F 6)  Other:	Patent Application (PTO-152)				

Application/Control Number: 10/790,828

Art Unit: 1722

## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-19, drawn to a crystallization apparatus, classified in class 117, subclass
     200.
  - II. Claims 20-21, drawn to a crystallization method, classified in class 117, subclass3.
  - III. Claims 22-36, drawn to a phase element, classified in class 359, subclass 237.
  - IV. Claims 37-38, drawn to a semiconductor device, classified in class 257, subclass1.
- 2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used in another and materially different process, such as one where a single crystal film is re-crystallized.

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

Art Unit: 1722

case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require a phase modulation unit with a first area having a first phase value and a second area having a second phase value. The subcombination has separate utility such as modulating the phase of laser light.

Inventions I and IV are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus, such as an apparatus where the phase modulation element has a phase distribution based on a phase modulation unit which is optically the same size as the radius of a point spread distribution range of the an image formation optical system.

Inventions II and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used in another and materially different process, such as one where a single crystal film is re-crystallized.

Inventions II and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be

Application/Control Number: 10/790,828 Page 4

Art Unit: 1722

made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another materially different process, such as a process where a single crystal film is re-crystallized.

Inventions III and IV are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus, such as one where the phase element does not comprise a second area having a second phase value.

- 3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 4. Due to the complexity of the restriction requirement, a telephone call was not made to applicant to request an oral election to the above restriction requirement. 9MPEP 812.01 [R-3]).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and

Art Unit: 1722

specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Song whose telephone number is 571-272-1468. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/790,828 Page 6

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew J Song Examiner

Art Unit 1722

MJS

June 14, 2006

SUPERVISORY PATENT EXAMINE
YECHNOLOGY CENTER 1709